

ABSTRACT OF THE DISCLOSURE

A method and apparatus is disclosed for gravure coating a liquid reactive with the atmosphere onto a web. The gravure apparatus comprises an engraved gravure cylinder, an impression roller backing the web and pressing it onto the gravure cylinder to form a nip, a curtain or jet formation means to wet the surface of the gravure cylinder, and a doctor blade means for wiping excess coating liquid from the surface of the gravure cylinder prior to the nip. A shroud encompassing the gravure cylinder and the curtain or jet formation means creates a first zone between the nip and a partitioning baffle extending from the shroud, a second zone between the partitioning baffle and the doctor blade means, and a third zone between the doctor blade means and the nip. A gas non-reactive with the coating liquid is supplied to each zone by a gas distribution means such that the reaction rate of the coating liquid with the atmosphere is greatly reduced and the curtain or jet is not disrupted. In a particularly preferred embodiment, the gravure apparatus and shroud are enclosed by solid walls and doors.